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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/196,013	11/19/1998	NORIO KOMA	5586D-7076	8659

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EXAMINER

NGUYEN, FRANCIS.N

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 08/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/196,013

Applicant(s)

KOMA, NORIO

Examiner

FRANCIS NGUYEN

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 7-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,3-5, 7-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/3/02 and 7/29/02 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by McKnight (U.S. Patent 6,144,353).

As to claim 1, McKnight discloses a liquid crystal display(LCD system 12, column 8, lines 48-51) having liquid crystal sandwiched between a pair of substrates (electro-optic layer 22, figure 1A, column 3, line 61) having electrodes (pixel electrode 28 and common electrode 26, column 8, lines 56-64) for driving the liquid crystal based on respective R, G , and B signals (figure 2C, three different driving waveforms 154/155/156) to control transmittance of each of the R light component, G, and B light components for color display, wherein each of upper limit values of ranges for driving voltages respectively for R display , G display, and B display(display of first color subframe, second color subframe and third color subframe, figures 3A and 3B) . Note figure 2C indicates the intensity R/G/B display at t2, t4 and t6, and control voltages of common electrode Vcg, also overdrive voltage (column 9, lines 62-63). Note the corresponding one-to-one relationship between driving voltage and intensity as illustrated in figure 2B and note the separate display of R light, G light, B light in figure 2C .

As to claim 5 , note the same citations for claim 1.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKnight in view of Sawada (U.S. Patent 6,078,317).

As to claims 3 and 7, McKnight fails to teach gamma correction. Sawada discloses gamma characteristic adjustment circuit 19(figure 1, column 6, lines 63-65) for LCD display. It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the apparatus of McKnight then add a gamma adjustment circuitry, as taught by Sawada, to obtain the combined apparatus McKnight-Sawada , because it would result in proper luminance on LCD display. The amended phrase “without control voltage...simultaneously “ does not change ground of rejection.

As to claims 4 and 8, McKnight-Sawada does not expressly teach poly-Si TFT. However, fabrication and application to Active Matrix LCD is well known in the art at the time of the invention. It would have been obvious to a person of ordinary skill in the art to make use of poly-Si TFT as switching elements in the apparatus of McKnight-Sawada because it would result in increased aperture ratio, production yield and increase of pixel density in LCD display.

As to claims 9-18, see the same citations above. The ground of rejection is the same as that of claims 1, 3-5, 7-8.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **FRANCIS N NGUYEN** whose telephone number is **703 308-8858**. The examiner can normally be reached during hours 8:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached at 703 305-4579.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

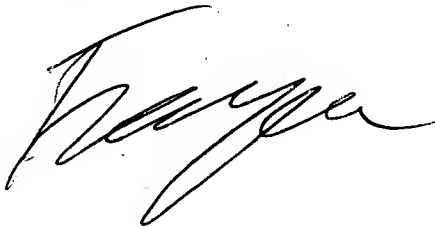
or faxed to:

Art Unit: 2674

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service whose telephone number is
(703) 306-0377.



FRANCIS N NGUYEN
Examiner
Art Unit 2674

FN
August 9th 2002